

# Consumers' Role in Health Care

## Reducing Demand for Care through Chronic Disease Prevention & Health Promotion

*Section of Chronic Disease Prevention & Health Promotion*

*Kathy Allely, MPH*

*Andrea Fenaughty, PhD*

*Karol Fink, RD*

Presentation to the Alaska Health Care Commission

August 26<sup>th</sup>, 2009

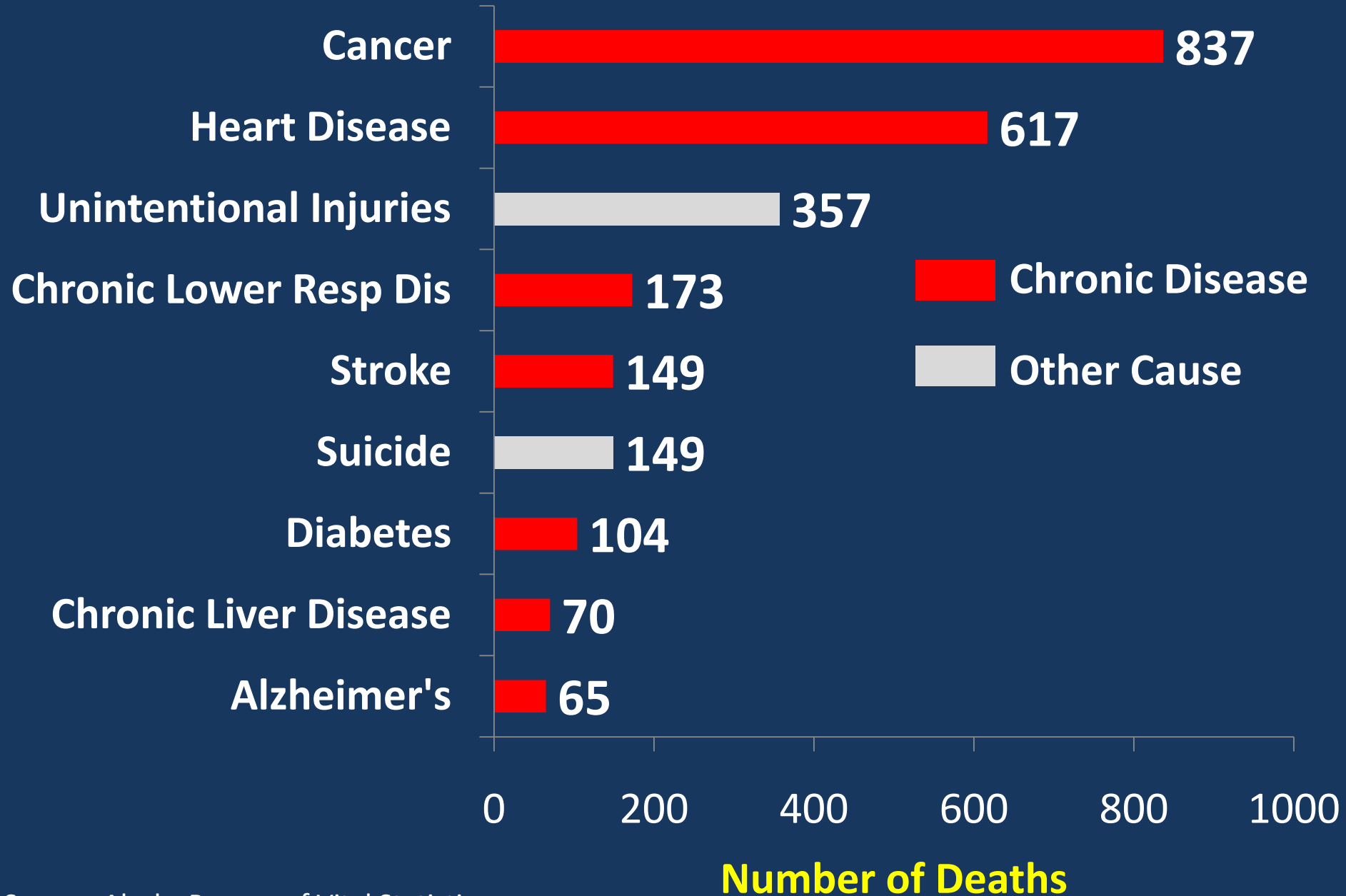
# Overview

- **Why** be concerned about chronic disease?
- **What** needs to be done in order to address chronic disease?
- **How** should this look in Alaska?

# Why Invest in Preventing Chronic Disease?

- Chronic illness is the leading cause of death and disability in the US
  - 7 of 10 deaths nationally
  - 6 of 10 deaths in Alaska (4 of top 5 killers)

# Leading Causes of Death in Alaska - 2007



# What's really killing us?

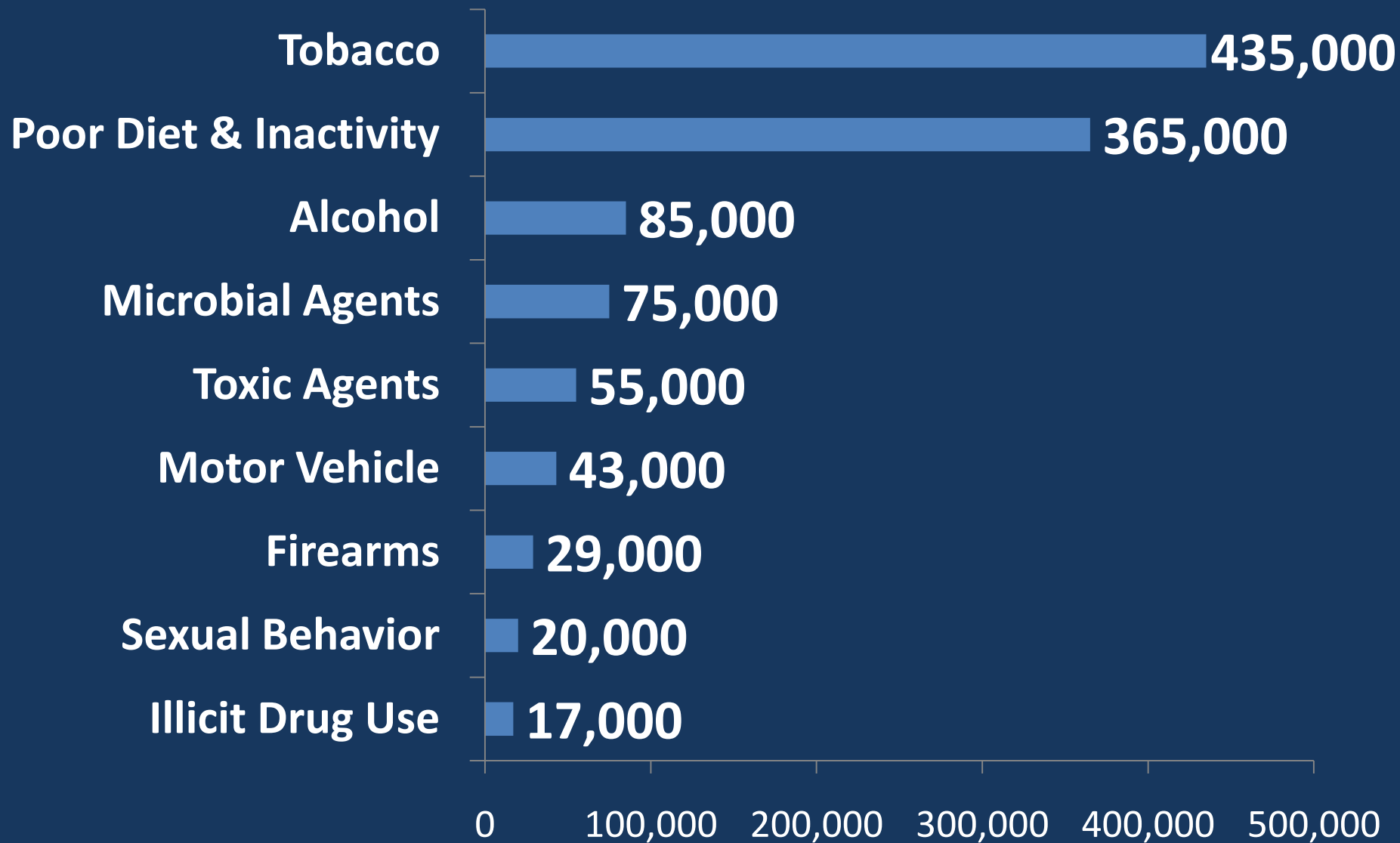
## 3-Four-50

**3** risk factors (tobacco use, poor diet, inactivity) contribute to the

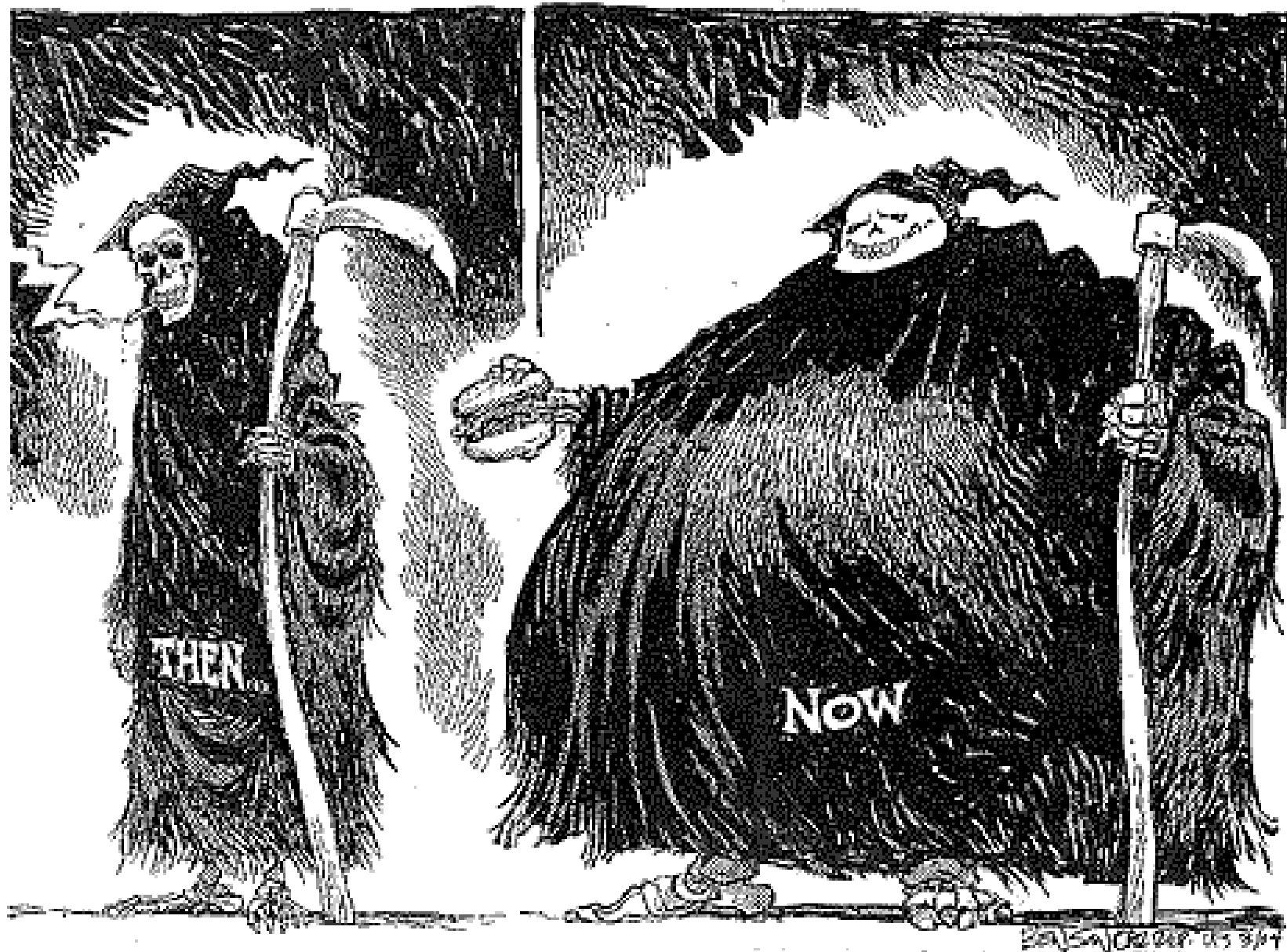
**4** chronic diseases (heart disease, diabetes, lung disease, and many cancers) which are responsible for

**50** percent of deaths in the world.

# Actual Causes of Preventable Death in the US, 2000\*

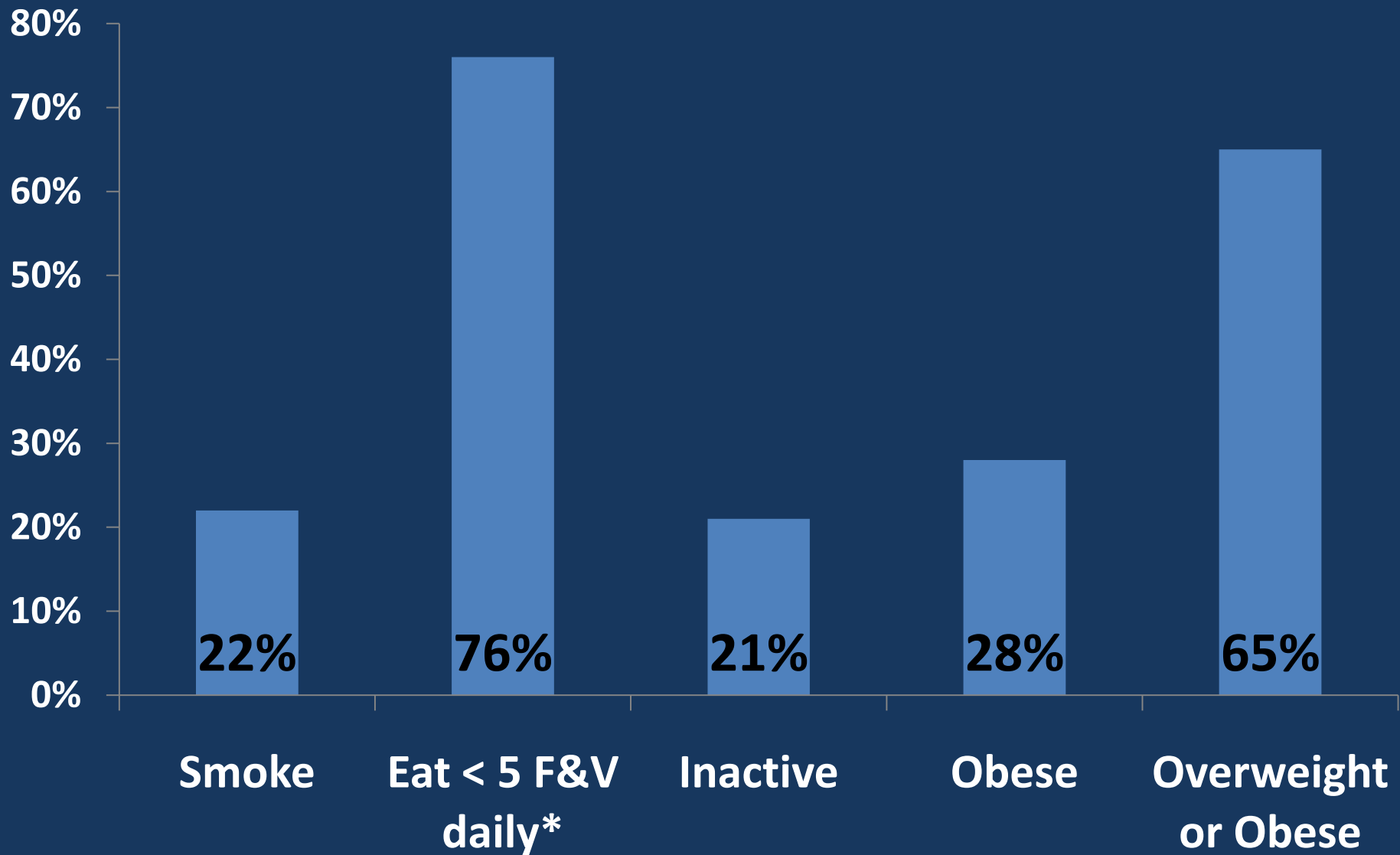


\*Mokdad, Marks, Stroop & Gerberding (2004)



BIG TOBACCO AND BIG BURGER VIE FOR THE TITLE AS THE NATION'S  
No. 1 KILLER.

# Tobacco Use, Poor Diet, Physical Inactivity & Obesity, Alaska Adults, 2008 BRFSS

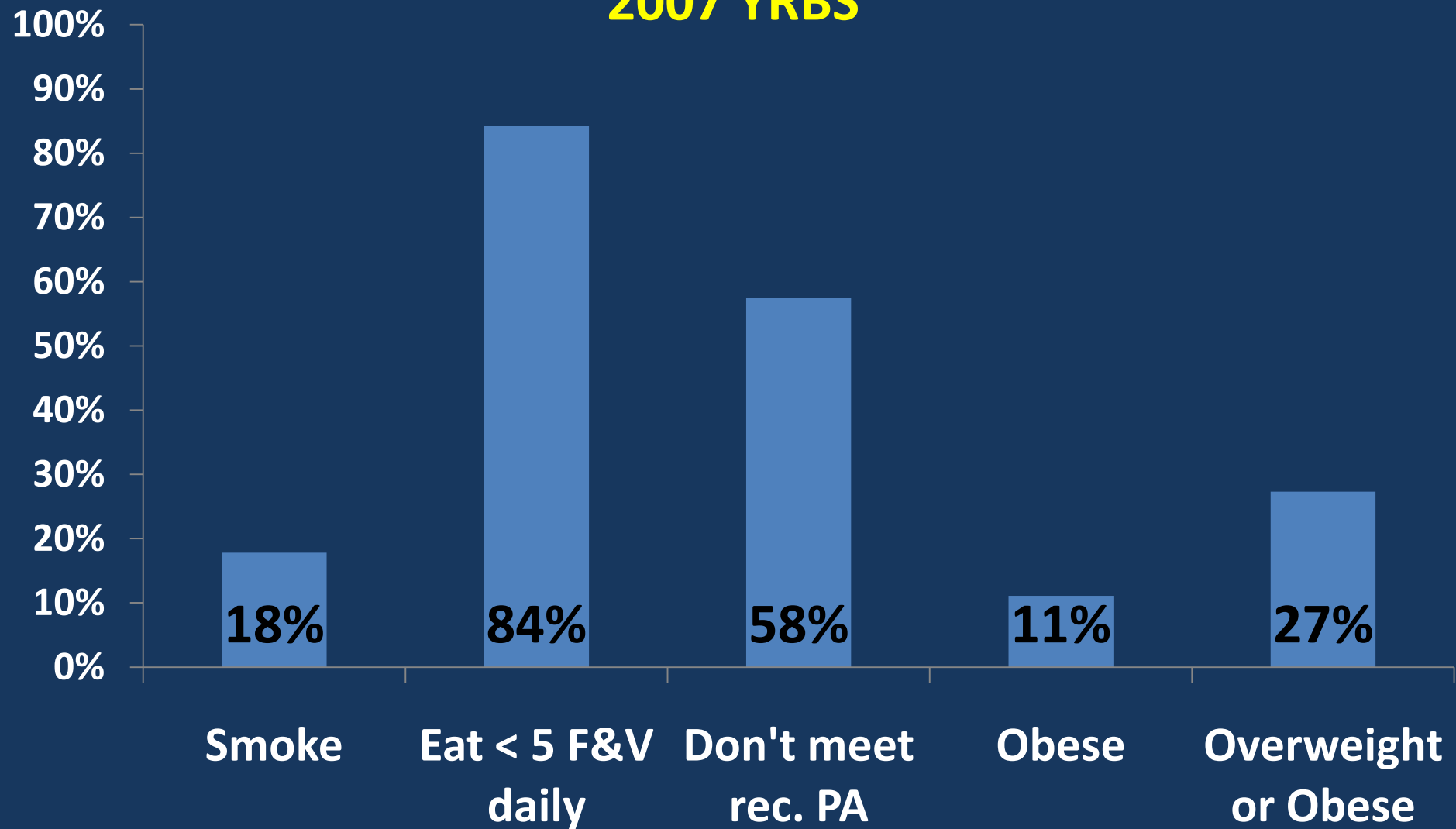


\*2007 AK BRFSS

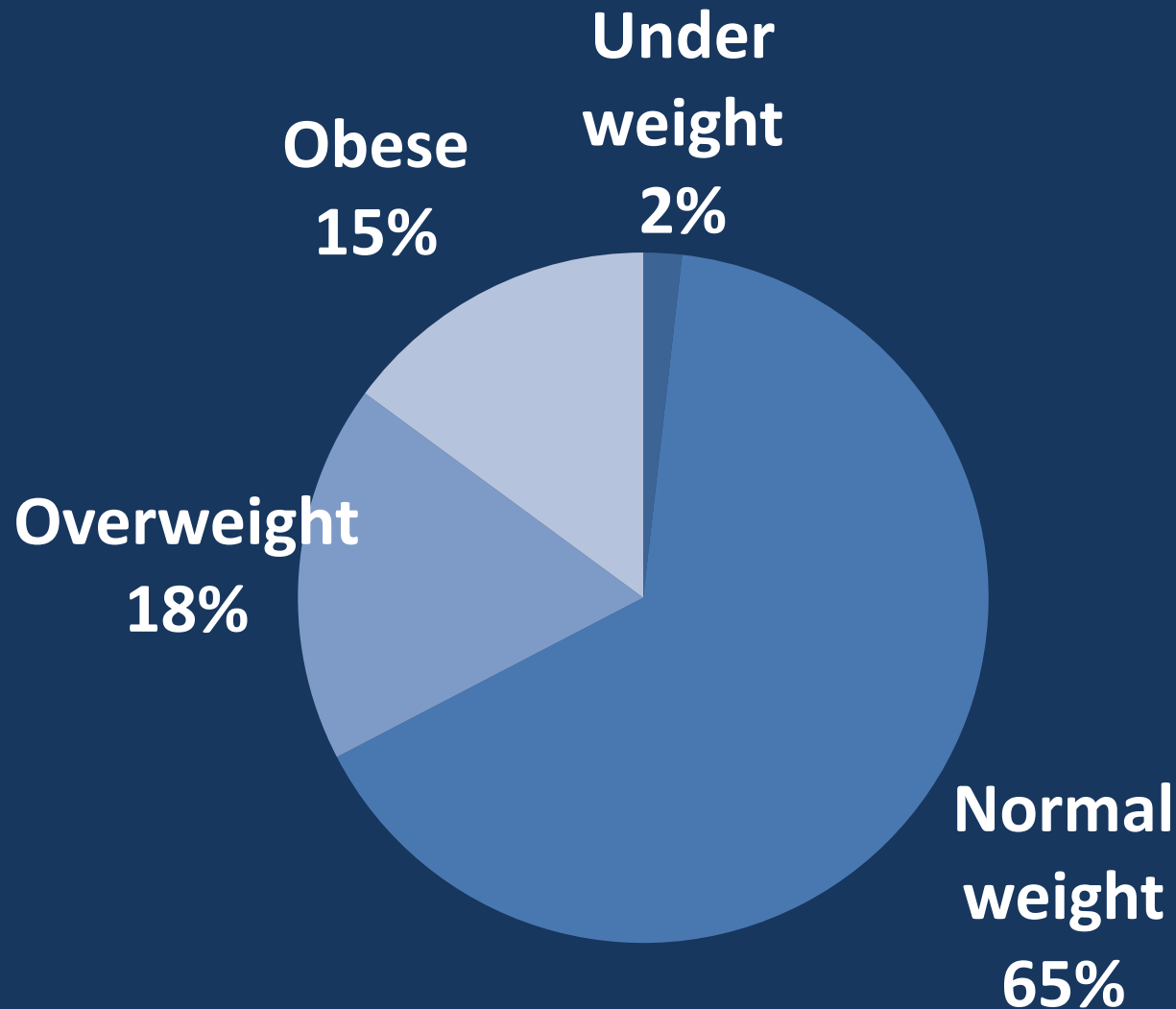


# **Tobacco Use, Poor Diet, Physical Inactivity & Obesity, Alaska High School Students**

## **2007 YRBS**

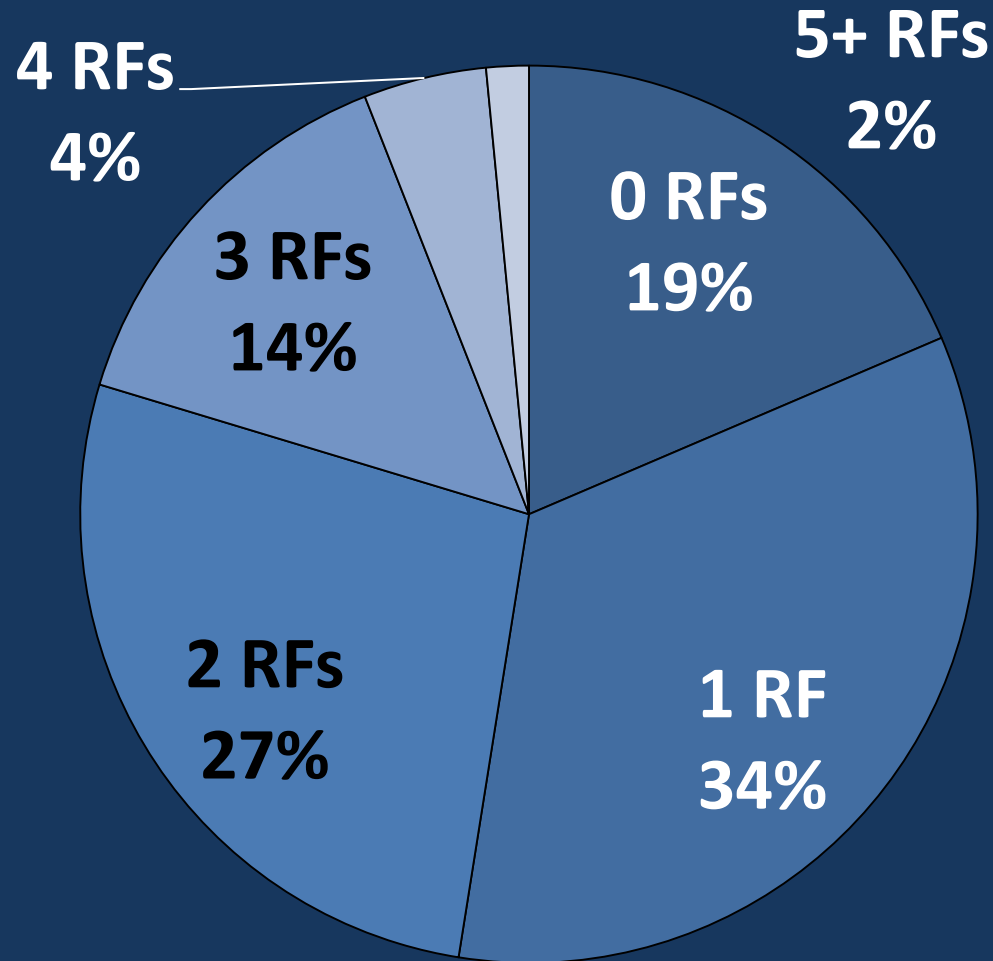


# Weight Status, Anchorage School District Kindergarten and First Grade Students, 2007-2008



## Prevalence of Multiple Risk Factors (RFs):

Smoking, Hypertension, High Cholesterol, Obesity, Diabetes,  
& Physical Inactivity, Alaska Adults



# Quality of Life & Performance Costs of Chronic Disease

- Obese Alaskans report their health status as fair or poor 2X more than normal weight (21% vs.10%)
- 72% of normal weight HS students report getting mostly A's and B's, compared to only 56% of obese
- 47% of Alaskans with diabetes have a disability, compared to 19% without diabetes

# Economic Costs of Chronic Disease

- Nationally in 2007, 75% of the \$2.2 trillion spent in total health care costs attributable to chronic disease (CMS)
- Selected annual chronic disease costs in Alaska:
  - **\$600 million** for *heart disease & stroke* hospitalization
  - **\$419 million** for direct and indirect *diabetes* costs
  - **\$491 million** for direct medical care related to *tobacco* use and lost productivity from tobacco-related deaths
  - **\$477 million** in direct medical costs of *obesity...*
  - ***\$9-10 million in cost attributed to obesity for State of AK Employees***

# Obesity's Costs

Finkelstein et al. (2009):

“...although health reform may be necessary to address health inequities and rein in rising health spending, ***real savings are more likely to be achieved through reforms that reduce the prevalence of obesity and related risk factors, including poor diet and inactivity.***”

# What Incentivizes Behavior Change?

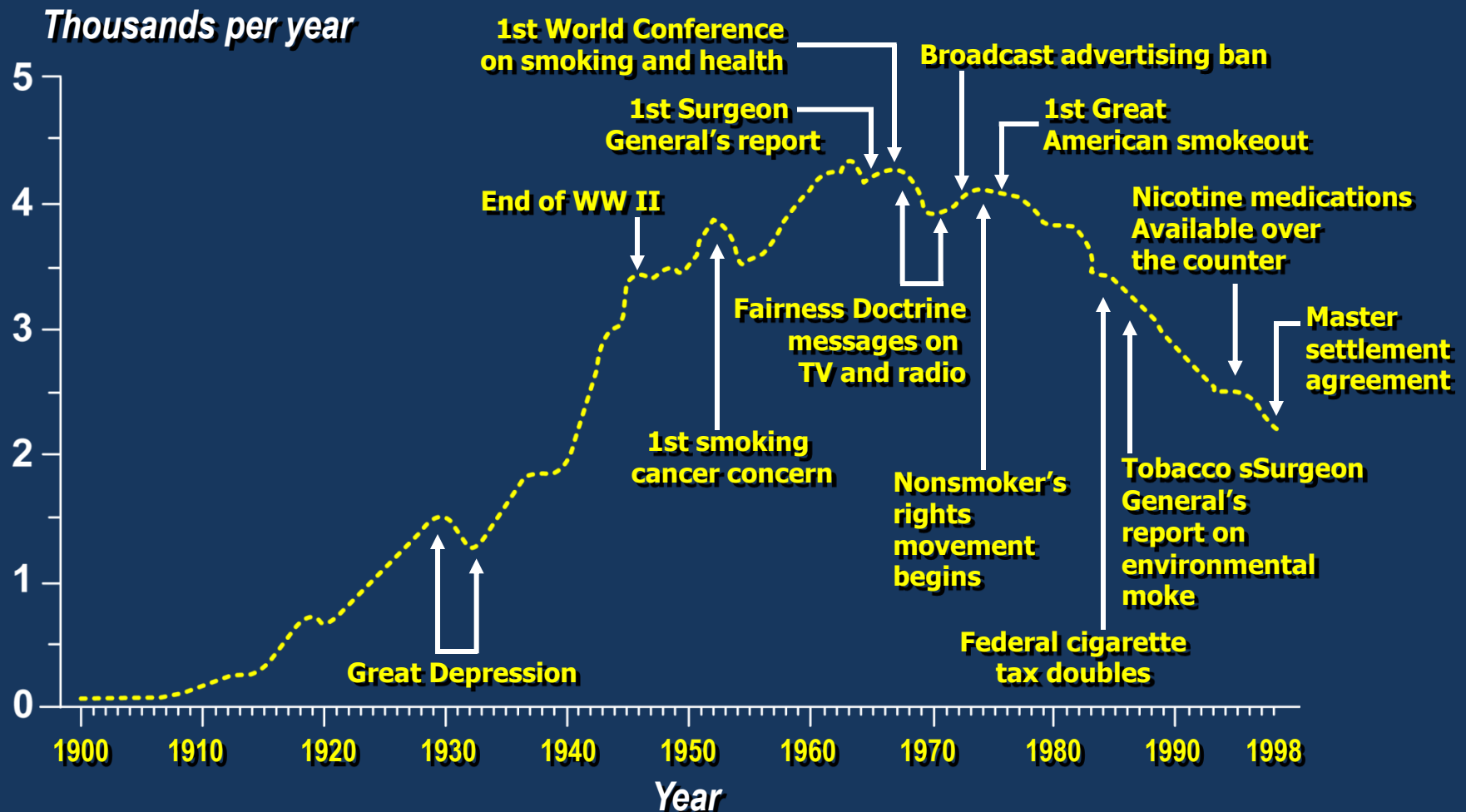
## How Do We Accomplish It?



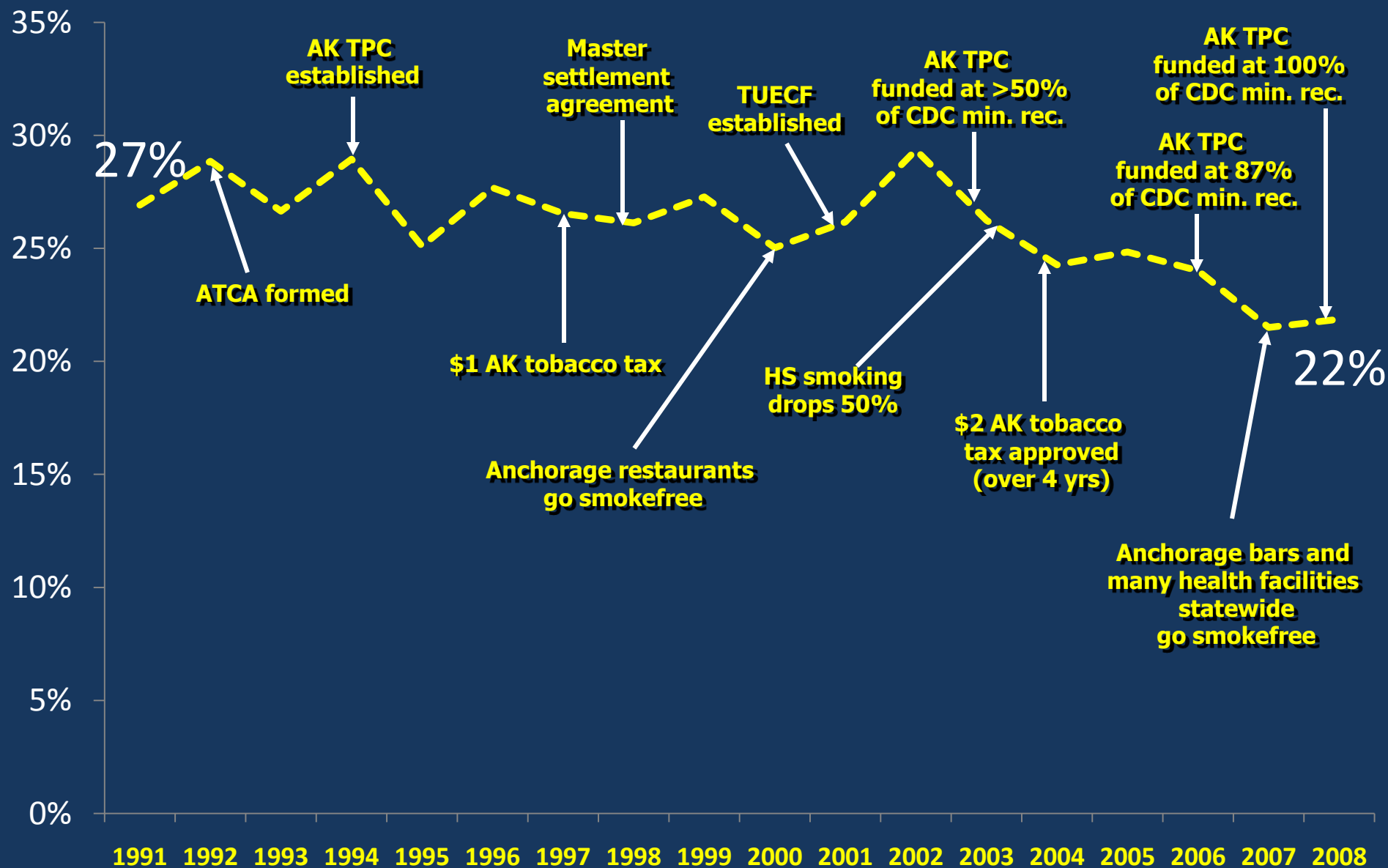
# Lessons from Tobacco...



# Annual Adult per Capita Cigarette Consumption and Major Smoking and Health Events – US 1900-1998



# Adult Smoking Prevalence in Alaska and Major Smoking and Health Events – AK 1991-2008



# What Worked for *Tobacco*

## **Price**

- Increasing price of tobacco

## **Limiting Exposure**

- reducing kids' access to tobacco
- reducing secondhand smoke

## **Change the Image**

- reducing tobacco ads targeting kids
- clearly communicating harms

# From What to How

## What

- Price
- Exposure
- Image

## How

CDC Best Practices

- Community Coalitions
- Cessation Support
- Media Campaign
- Evaluation
- Administration and Management

# What Will Work for Obesity\*

## **Price**

- increase cost unhealthy foods
- decrease cost of healthy foods

## **Exposure**

- Increase access to healthy foods, recreation areas
- Decrease access to junk food

## **Image**

- reduce unhealthy food ads targeting kids
- show harms

\*per Dr. Frieden, *Weight of the Nation*, July 2009

# From What to How

## What

- Price
- Exposure
- Image

## How

- Community Coalitions
- Support Providers
- Media Campaign
- Evaluation
- Administration and Management

# Support for Community-Based Efforts

7/24/2009 MMWR -

Recommended 24 evidence-based strategies to:

1. make healthy food/beverages affordable, available (6)
2. make the healthy food choice the easy choice (4)
3. encourage breastfeeding (1)
4. encourage physical activity among kids (4)
5. create communities that support physical activity (8)
6. encourage communities to organize for change (1)

# 1. Making healthy food/beverages affordable, available: **Examples**

## US example

- A new funding initiative was created using public funds to leverage supermarket development. The initiative has committed \$67 million in funding for 69 supermarket projects in 27 Pennsylvania counties, creating or preserving 3,900 jobs (Burton & Duane, 2004).

## Recommendation for Alaska:

- Expand Electronic Benefits Transfer (EBT) cards use for recipients of Supplemental Nutrition Assistance Program (Food Stamps), WIC and Senior Farmer's Market Programs.



## 2. Make the healthy food choice the easy choice: **Examples**

### US example

- A school district implemented a vending machine policy that eliminated less healthy food options and replaced them with healthier choices. Sales increased from \$9,000 to \$41,000 annually.

### Recommendation for Alaska:

- Ensure that students have healthy food and beverage choices in schools by setting competitive food standards that exceed federal standards.

# 3. Encourage breastfeeding: Examples

## US example

- The Navajo Nation Healthy Start Act requires employers to provide working mothers a place to breastfeed and unpaid time during work hours to breastfeed their children or to use a breast pump.

## Recommendation for Alaska:

- Protect breastfeeding working mothers through legislation that requires employers to provide working mothers a private place to and unpaid work time to breastfeed their children or to use a breast pump

## 4. Encourage physical activity among kids: **Examples**

### US example

- Kentucky overhauled its school-based PE curriculum. PE teachers were trained to provide quality PE and keep students physically active for at least 30-to 60-minute increments during class time.

### Recommendation for Alaska:

- Statewide EED regulatory change to provide an additional mechanism enabling more teachers to obtain an endorsement as a highly qualified PE teacher

## 5. Create communities that support physical activity: **Examples**

### US example

- A community enlisted a traffic engineer to help schools identify and create safe walk and bike routes between residential areas and schools. In the first 2 years of the program, the number of children walking to school increased 64%, biking 114%, and carpooling 91% .

### Recommendation for Alaska:

- State government adopt a policy for designing and operating streets with safe access for all users which includes at least one element suggested by the National Complete Streets Coalition

## 6. Encourage communities to organize for change: **Examples**

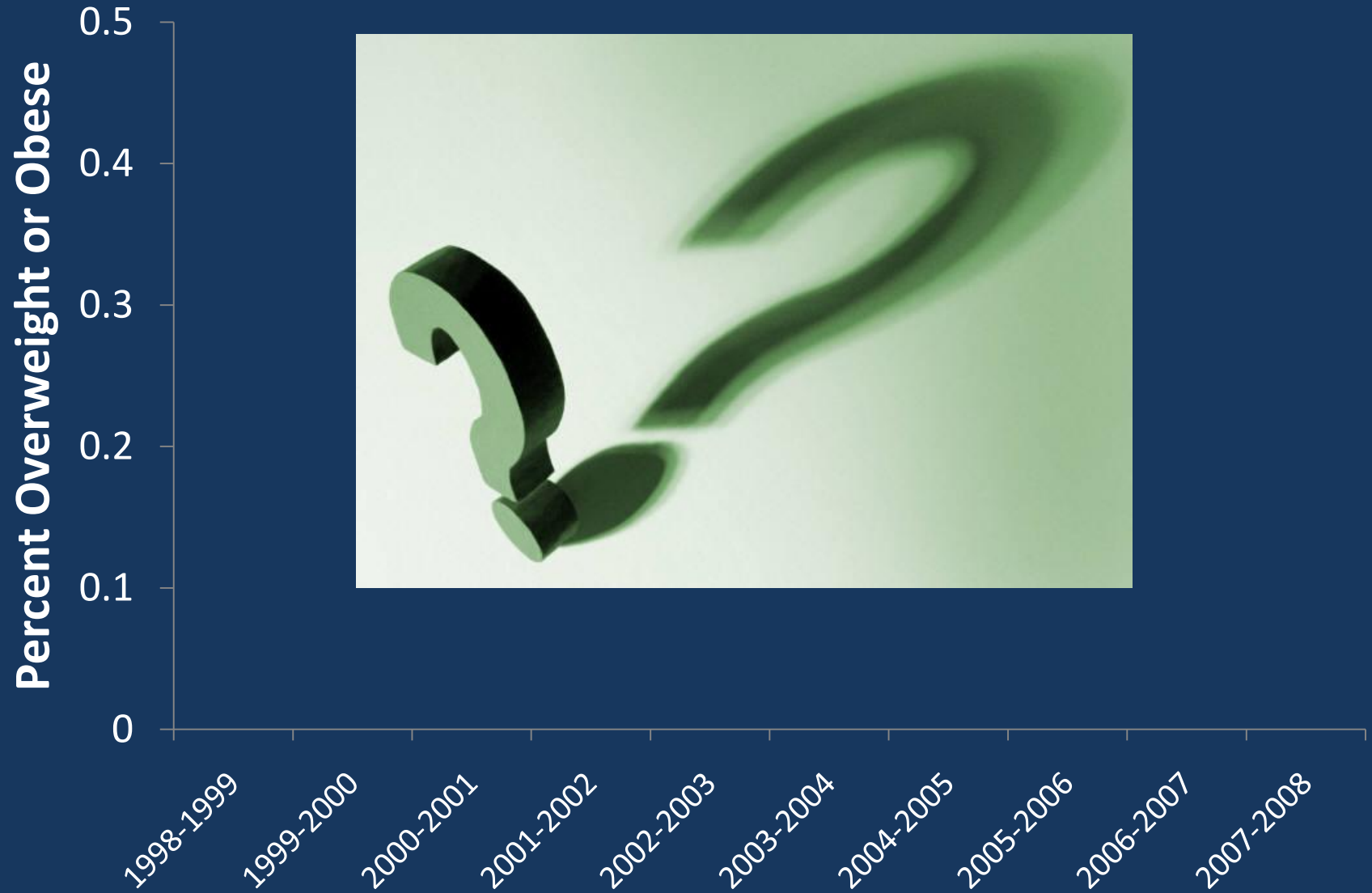
### US example

- A small group of local mothers formed a walking group to improve their fitness and build community. With the help of police, parks officials, and the local Chamber of Commerce, the group cleaned up a long-neglected park and reported meaningful improvements in their health.

### Recommendation for Alaska:

- Provide grants to communities to develop obesity prevention coalitions and implement local strategies

# How are we doing?

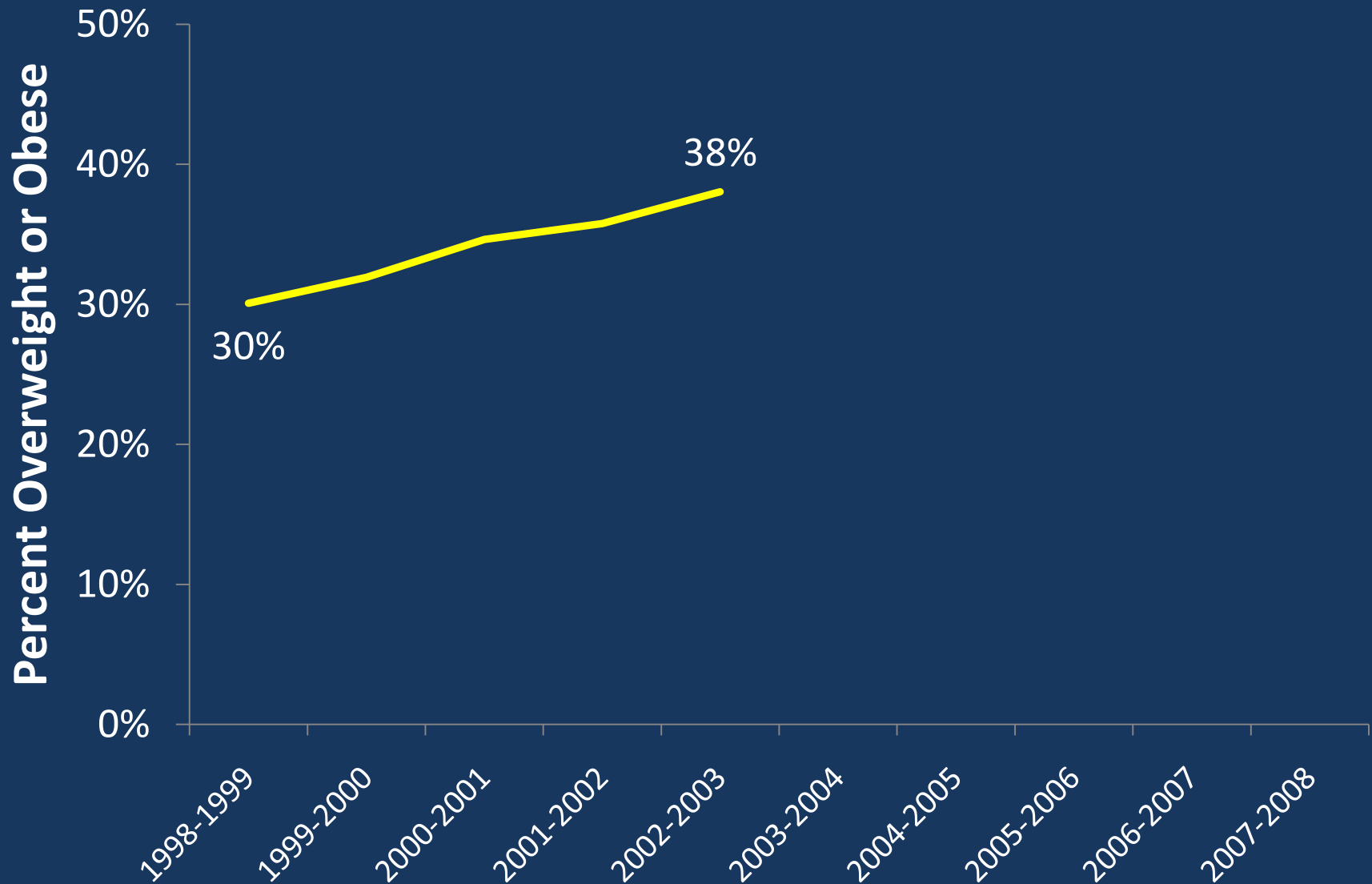


# The Role of Evaluation -

## *Prevalence of Overweight and Obesity Among Anchorage School District Students: 1998-2008*

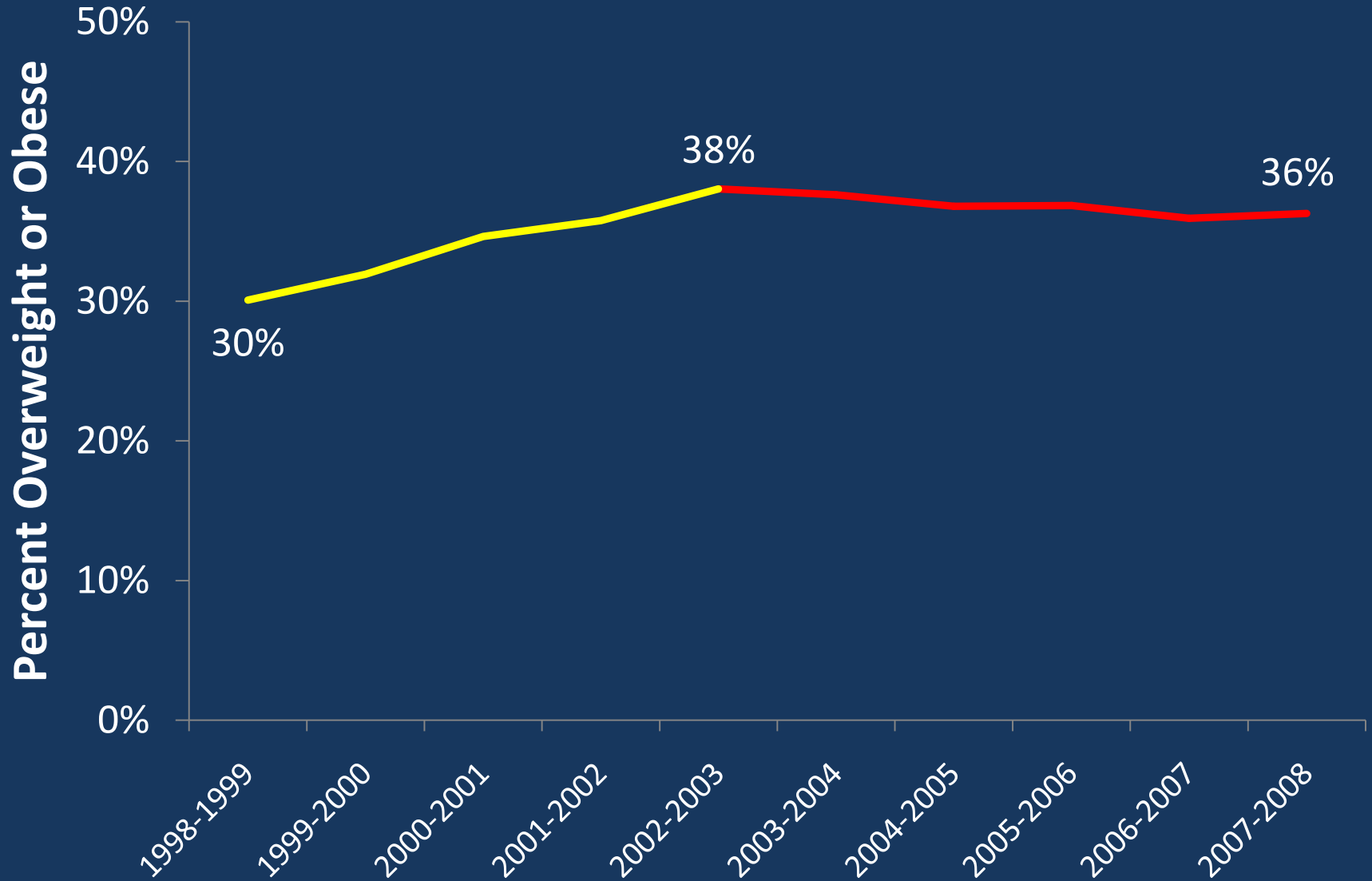
- In 2003 and 2008, DPH partnered with ASD
- Trainings, equipment to collect student heights and weight, analysis
- 122,081 assessments included, representing 28% of total ASD enrollment during 1998-2008 included
- Body mass index (BMI) calculated as a non-invasive, indirect measure of percent body fat, health risk
- BMI compared with sex- and age-specific reference standards: **under, normal, overweight or obese.**
- Examine 10-year trends and cohort analysis

# Prevalence of Overweight/Obesity, ASD Students, 1998-99 through 2002-03





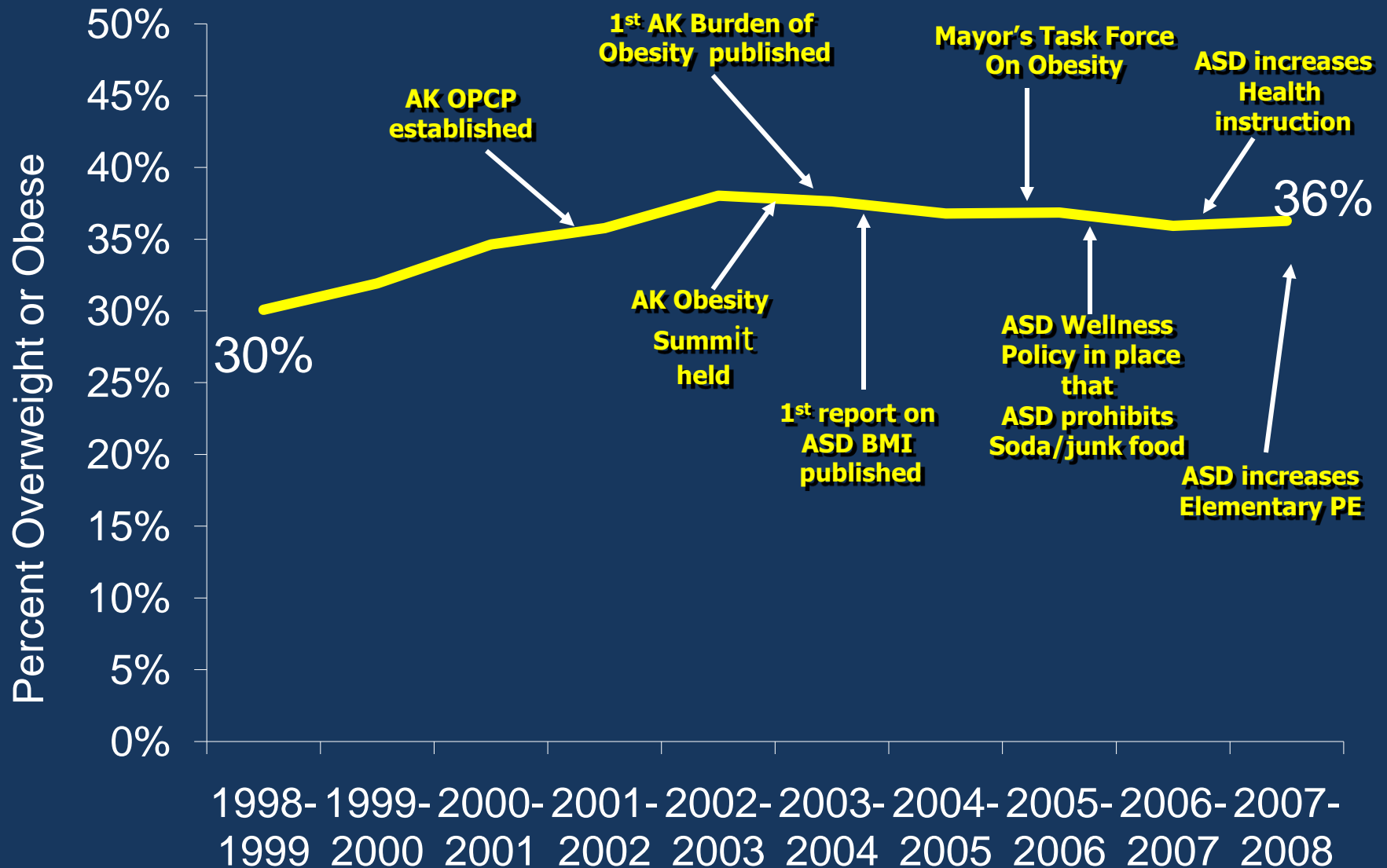
# Prevalence of Overweight/Obesity, ASD Students, 1998-99 through 2007-08



# Study Summary

- During 2007-08
  - 36% of ASD student were above **normal weight** (BMI  $\geq 85^{\text{th}}$  percentile)
  - 20% of middle and high school ASD students were **obese** (BMI  $\geq 95^{\text{th}}$  percentile)
- The increasing prevalence of obesity and overweight appear to have plateaued during the past 5 years
- Most children who entered ASD obese were still obese 10 years later
  - “They’ll just grow out of it” doesn’t appear to hold

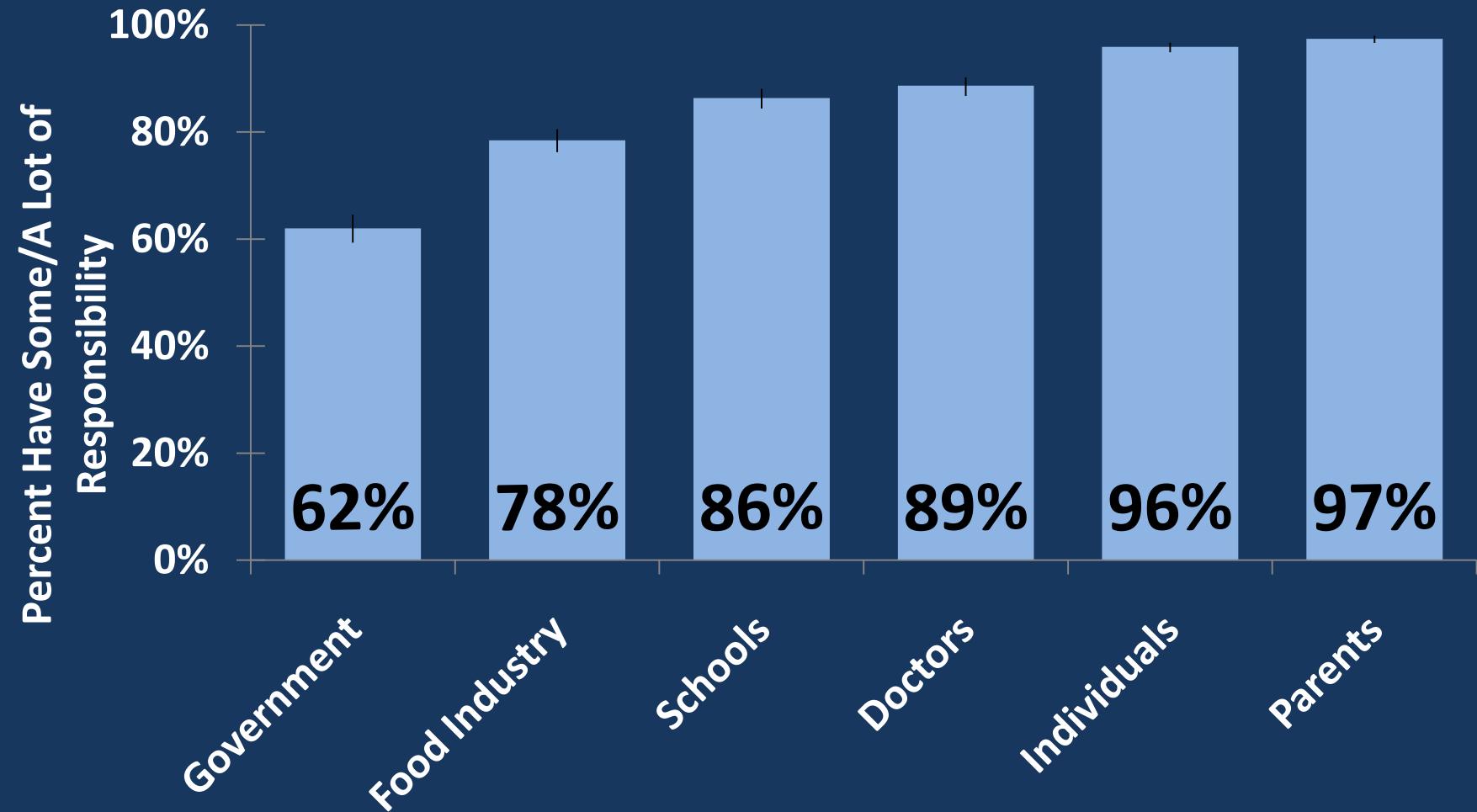
# ASD Student Overweight and Obesity Prevalence in Alaska and Selected Obesity-Related Events – AK 1998-2008



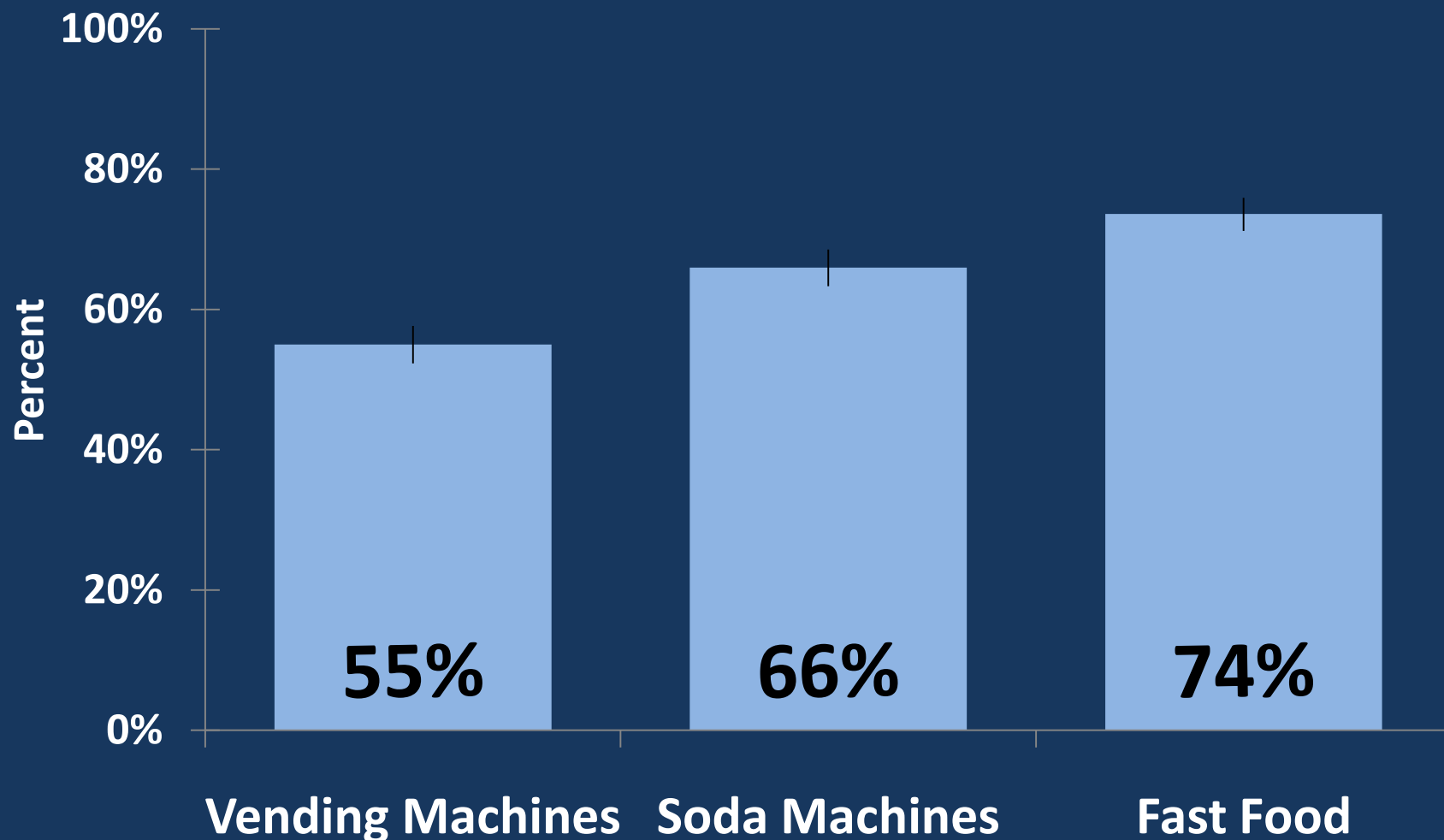
# Final Thoughts

- Tobacco's lesson
- Big, fat ship and no silver bullets
- Public Support
  - A national survey commissioned by ACSM found:
    - **94 percent** of Americans feel a national physical activity plan is important in helping citizens avoid chronic conditions and diseases.
    - **97 percent** of Americans think changes in health care system that support disease prevention through physical activity are important.

# Percentage Who Believe Each Source Has Some or A Lot of Responsibility for Addressing Obesity in the US, Alaska Adults, 2005



# Percentage Who Say Vending Machines, Soda Machines, and Fast Food Should Not Be Allowed in Schools, Alaska Adults, 2005



# Percentage Who Support or Strongly Support Each Policy, Alaska Adults, 2005

